

# Little Red Hen

**Purpose:** The story of the Little Red Hen is used to explain the process of wheat production and bread making. Students are also given the opportunity to experience the threshing process and bread making first hand.

**Time:** 1-2 hours (depending on detail)

**Level:** K

## Materials:

- *Little Red Hen* book or story
- How To Do It! Threshing or Removing the seed worksheet
- Wheat stems

## Optional Materials

- From *Wheat to Bread* book written by Kristin Thoennes Keller
- Ingredients for making bread in a bag



## Minnesota/Common Core Language Arts Standards and Benchmarks

0.1.1.1 With prompting and support, ask and answer questions about key details in a text

0.1.1.2 With prompting and support, retell familiar stories, including key details

0.1.1.3 With prompting and support identify characters, settings and major events in a story

0.8.2.2. Confirm understanding of a text read aloud or information presented orally through other media by asking and answering questions about key details and requesting clarification if something is not understood.

## *Background*

Wheat is useful as a livestock feed, but its main purpose is as human food. It is nutritious, easily stored and transported and easily processed into various types of food. Unlike any other plant-derived food, wheat contains gluten protein that causes leavened dough to rise forming very small gas cells that hold carbon dioxide during fermentation. This gluten and fermentation process produces light textured bread. Bread and other wheat products are high in carbohydrates; contain valuable protein, minerals and vitamins.

Minnesota ranks tenth in the nation for overall wheat production and third in the US for spring wheat production. There are five major classes or types of wheat grown in the United States. The most popular classes are hard red spring wheat and hard red winter wheat. Spring wheat is planted or seeded in April and May, and harvested in August and September. Winter wheat is planted August through October, begins to grow, goes dormant in the winter, and then continues to grow once the snow melts and the soil warms in the spring. Winter wheat is harvested in May, June and July. A piece of machinery called a combine is used by farmers to harvest the mature, golden colored wheat. The important part of the wheat plant is the seed head that contains the wheat seeds that are ground into flour. A combine cuts the wheat plant and separates the grain (seed) from the stem and seed covering or hull. The grain is collected and the rest of the plant – referred to as the chaff – is used for animal bedding or forage. In 2010, Minnesota farmers harvested wheat from 1.6 million acres of land. This produced over 88 million bushels of wheat that is valued at \$540 million dollars.

Both hard-red winter wheat and hard-red spring wheat are ground into flour that is used for making bread. Another class of wheat, durum wheat is used in macaroni, spaghetti and other pasta products. Soft-red winter and soft-white wheats are grown in the eastern part of the United States. These wheat classes are softer and have less protein. They are used to make flour for cakes, biscuits, pastries and other breakfast foods.

*Information from:*

[http://www.agron.iastate.edu/courses/agron212/readings/oat\\_wheat\\_history.htm](http://www.agron.iastate.edu/courses/agron212/readings/oat_wheat_history.htm)

This lesson will allow students to compare the little red hen and real life Minnesota wheat farmers.

## Procedure

1. Read the story of the Little Red Hen to the students, using the actual book or the attached story.
2. After you are done reading, divide the white board into three segments. Write “Beginning,” “Middle” and “End” at the top of the segments
3. Ask the students to retell the story based upon the three different segments. Write their comments on the board. You may wish to have the students elaborate on the emotions or feelings that may have been expressed by the Little Red Hen or other animals in the story. Students may also enjoy acting out the different segments of the story.
4. Share information about wheat production in Minnesota with the students (use the Background Information). Ask students how the Little Red Hen is like a farmer in Minnesota who is growing wheat for us to eat.  
OPTIONAL: Use the book *From Wheat to Bread* by Kristin Thoennes Keller to describe and illustrate the steps taken to transform wheat grain into bread.
5. Give each student a wheat stem. Bundles of wheat can be obtained from area farmers or see the Resources section for where they can be ordered.
6. Ask students to predict the number of seeds in their seed head, then using the threshing directions (see attachment), ask the students to thresh their wheat. Model this process so students can see what to do! Threshing means to remove the kernel from the hull or chaff of the plant.
7. Ask students to count the seeds they removed from their wheat stem.
  - a. Were their predictions accurate?
  - b. Do the students think they have enough wheat to make a loaf of bread? – *It takes about 4 cups of flour to make a loaf of bread.*OPTIONAL: Grind the bread into flour using a hand grinder.
8. Ask students to describe the similarities and differences between what they have experienced and what the Little Red Hen did in the story.

## Additional Activities

- Use whole wheat or white flour to make bread in a bag. Instructions can be found at:  
[http://aitc.oregonstate.edu/resources/pdf/activity/bread\\_bag.pdf](http://aitc.oregonstate.edu/resources/pdf/activity/bread_bag.pdf)
- Take a field trip to the Mill City Museum or view their web-site for many great resources. [www.millcitymuseum.org/](http://www.millcitymuseum.org/)
- Create an opportunity for students to write or draw pictures about the lessons they learned from the Little Red Hen.

## Resources

- Bundles of wheat can be obtained from local farmers or ordered through Utah Agriculture in the Classroom; go to <http://agclassroom.org/us> and search “wheat” in the e-store.
- The *Little Red Hen* is available in multiple versions from bookstores and [www.amazon.com](http://www.amazon.com). Free versions of the story are also available through many websites found through internet search engines.

- *From Wheat to Bread* by Kristin Thoennes Keller can be purchased through Minnesota Agriculture in the Classroom.  
<http://www.mda.state.mn.us/kids/childrens-lit-bundle.aspx>

*Adapted from North Carolina Agriculture in the Classroom*